

**OPTIMAL GROUP OF COMPANIES: THE  
RELATIONSHIPS BETWEEN JOB CHARACTERISTICS  
AND EMPLOYEES' JOB SATISFACTION**

**BY**

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## DECLARATION

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## ABSTRACT

The environmental forces that stem from the technological advancement, social changes, economic and demographic changes and consumerism have placed a great challenge to the petrochemical industry players in ensuring their organizations achieved a world class status. Therefore, the success of any organization in the petrochemical industry depends on employees who enjoy their day-to-day job and feel rewarded by their efforts. As part of the journey in achieving a world class petrochemical company by the Optimal Group of Companies, the success will depend on its high quality and satisfied work forces working in the organization. This research offers an opportunity to assess the relationships between the job characteristics and the level of employees' job satisfaction in Optimal Group of Companies, Kerteh, Trengganu. Apart from that, the research also attempts to fulfill the following objectives: -

- a. To identify the relationship between overall core job characteristics such as skill variety, task identity, task significance, autonomy and job feedback to job satisfaction.
- b. To identify the relationship between demographic factors such as gender, age, tenure, job position/group, education and marital status to job satisfaction.

The data were collected by using a structured questionnaire and analyzed by using Statistical Package for the Social Sciences (SPSS®, 13.0). In summary, the results of the study appear to show that only two job characteristics, namely task significance and task feedback, are positively related to job satisfaction in Optimal Group of Companies.

## **DEDICATION**

Bismillahirrahmanirrahim

This project paper is dedicated to

Our parents,

Haji Zainuddin Hj Haron and Hajah Teh Alias,

Hajah Faezah Mohamed,

Our brothers and sisters,

Mohd Halimi (passed) and Mohd Hazman,

Nor Hayati, Nur Ida Faradilla and Nur Mardhiyah,

Our daughters

Hani Natasha and Hani Eliyana

and Family Members.

Without whose love and support, this journey would not have been successful



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## LIST OF ABBREVIATIONS

<b>SPSS</b>	-	Statistical Package for Social Science
<b>Optimal</b>	-	Optimal Group of Companies
<b>PETRONAS</b>	-	Petroleum Nasional Berhad
<b>SPM</b>	-	Sijil Pelajaran Malaysia
<b>ILPP</b>	-	Institute Latihan Praktikal PETRONAS
<b>STPM</b>	-	Sijil Tinggi Persekolahan Malaysia

## CHAPTER I

*"With an unhappy workforce you have nothing and you will never be great."*

-Annette Vershuren

### INTRODUCTION

#### 1.1 GENERAL

The key to success of any corporation or organization depends on employees who enjoy their job and feel rewarded by their efforts. Thus, Optimal Group of Companies (Optimal) which is embarking on its journey towards achieving a world class petrochemical company will not be able to achieve its aim to be a world class organization if its employees are not satisfied with their jobs. This is because job satisfaction represents a job evaluation of his or her job and work context (Mc Shane, 2005). It is an appraisal of the perceived job characteristics, work environment, and emotional experiences at work. Satisfied employees will have a favorable evaluation of their job, based on their observations and emotional experiences (Mc Shane, 2005). We could deduce that, job satisfaction is really a collection of attitudes about specific facets of the job as suggested by Locke (1976). Locke (1969) further stressed that job satisfaction is a state of pleasure gained from applying one's value to a job. Spector (1997, p.2) believes that job satisfaction "can be considered as a global feeling about the job as a related constellation of attitudes about various aspects or facets of the job."

Employees can be satisfied with some elements of the job while simultaneously dissatisfied with others (Mc Shane 2005). In addition to it, job satisfaction also has been widely researched both in terms of its determinants and its predictive power. Researches have noted that job satisfaction is directly related to employee turnover/retention rates (Cotton and Tuttle 1986; Shore, Newton et al. 1990) and absenteeism (Scott and Taylor 1985)

and indirectly to job performance and productivity although the findings for productivity have been somewhat contradictory.

Job characteristics have been found to have an impact on the level of job satisfaction. Higher job satisfaction has been linked with employees who are able to exercise autonomy and those who have a higher level of job involvement (Mortimer and Lorence, 1989; Sekaran, 1989). In addition to it, employees that perform tasks that have high skill variety, autonomy, feedback and identity, experienced higher job satisfaction and performed better (Hackman and Lawler, 1971).

## **1.2 THE BACKGROUND OF THE STUDY**

With this changing trend, conventional organization has been forced to modify or regroup their job configuration and training needs in order to meet the future challenges. The environmental forces that stem from the technological advancement, social changes, economic and demographic changes and consumerism have placed a great challenge to the petrochemical industry players such as Optimal Group of Companies (Optimal) in ensuring their organizations achieved a world class status. Therefore, the success of any organization in petrochemical industry depends on its employees who enjoy their day-to-day job and feel rewarded by their efforts. As part of the journey in achieving a world class petrochemical company in Optimal Group of Companies, the success of the target will depend on its high quality and satisfied work forces working in the organization.

The majority of oil and natural gas which is discovered and produced in the world is consumed as fuel – the energy that drives the automobiles, cools the buildings, and powers the appliances. However, some of these products that are pumped from beneath the ground

can be separated from the mixture that comes out naturally, and modified it by using an understanding in chemistry and engineering into products that are very useful to human beings. These petroleum-derived products are called petrochemicals. PETRONAS recognized that maximum value could be obtained from the oil and gas in Malaysia by converting them into combination of energy products (petrol, natural gas) and petrochemical products. This required two steps of investment; first, they invested in the technology and equipment needed to separate the energy products from those fractions that had other potential uses. Then they needed to invest in converting those materials into downstream products which Malaysia would otherwise import. DOW Company is of the companies recognized as world's technology leaders in petrochemicals business. DOW's core businesses include a broad range of basic petrochemicals, which means that a single partner that could provide a very strong portfolio of products in a single integrated facility. DOW also offered the marketing expertise needed to sell that mix of chemical products, which PETRONAS had no prior experience.

Optimal's products are sold in large quantities around the world. Optimal's chemicals do not however, go from the plant in Kerteh to the shelves of the local supermarket – at least not in the same form in which they come out of the plants. The products are separated from consumer use by at least one manufacturing step, but usually they are separated from consumer by more than one manufacturing step. A few examples are Ethylene Glycol, one of the largest volume products that Optimal produces. It is sold to manufacturers of PET resin, which is then sold to companies who use it to make bottles for mineral water and soft drinks. The same PET resin can be physically modified to make polyester fiber, which people may find in batik shirts or in cotton-polyester blend business suit. Butanol-Derivatives are components that can be found in a can of wall paint, and butyl acetate is a key ingredient in



many printing inks. One may find Optimal's products or their derivatives listed in the ingredient labels on products at home, for instance, cleansers, personal care products, and pharmaceuticals. In summary, the chemicals manufactured in Kerteh can be found in products where people see and use every day, but only after they are being processed.

Where will Optimal's products be sold and used to make the wide range of consumer goods discussed above? Obviously, some of the chemicals will stay in Malaysia, and will be purchased by local companies for domestic applications. The volume consumed locally is expected to grow significantly over the next several years as Malaysian economy grows. In addition to it, the products are also being exported to other countries in the Asia-Pacific region. This is normal in the petrochemical industry, where large-scale and efficient plants like Kerteh complex are built to serve large geographical markets. The products that Optimal make can be transported safely and efficiently in large ocean-going vessels to customers all over Asia. Some of the largest Asia Pacific markets are Australia, Taiwan, Korea and China. Therefore, Optimal is well positioned to compete in all those markets with their high quality products, economical production capability, and sophisticated logistics and delivery processes.

Definitely, Optimal will have other competitors as they work towards growing the company in order to achieve a world class petrochemical player and the competition is not expected to be in a small scale, either. Optimal will have to compete for higher profits and wider marketing range with global corporations like Mitsubishi, Celanese, Huntsman, LG Chemicals, and BASF. Not only competing for the profits, but also in term of its human resources, where Optimal needs to compete with other petrochemical player in order to retain its employee within the organization.

Therefore, the focus of the study is on job characteristics that can affect job satisfaction among the 600+ employees in all job group levels such as administrative, technician, executive technologist, professional and management in Optimal Group of Companies.

### **1.3 RESEARCH OBJECTIVE**

#### **1.3.1 General Objective**

This study aims to examine the relationship between job characteristics and job satisfaction in the Optimal Group of Companies. This research offers an opportunity to assess the company journey towards achieving its world class performance.

#### **1.3.2 Specific Objectives**

Apart from that, the research also attempts to fulfill these objectives as follows:

- To identify the relationship between overall core job characteristics such as skill variety, task identity, task significance, autonomy and job feedback to job satisfaction.
- To identify the relationship between demographic factors such as gender, age, tenure, job position/group, education and marital status to job satisfaction.

#### **1.4 THE SIGNIFICANCE OF THE STUDY**

The significance of the study is based on the Optimal Group of Companies drives for achieving its world class organization performance. Yet, the readiness and the application as well as the implementation of world class organization in the petrochemical industry is viewed as significantly constrained by a number of factors, including the hierarchy, structures, culture, tradition, the leadership as well as the level of job satisfaction. Therefore, the research reported here sought to show the relationship of the job characteristics and job satisfaction for a petrochemical company. The empirical information is believed to be useful in providing an insight to Optimal Group of Companies in accessing the organization towards achieving its world class organization performance. The research also offered Optimal an opportunity to assess and to formulate its strategies to encourage quality working life among its employees in all job group levels such as administrative, technician, executive technologist, professional and management in relation to the world class organization readiness.

#### **1.5 PROBLEM STATEMENT**

Apart from what has been highlighted earlier in this chapter, how far and how ready is Optimal Group of Companies in achieving world class organization performance? What is the yardstick to measure and ensuring that Optimal is moving towards the world class performer? It is imperative that Optimal ensures that its employees have the highest level of job satisfaction in performing their jobs in order for the company to achieve world class performance. The research rests on the premise that job characteristics such as skill variety, task identity, task significance, autonomy, and job feedback are related to job satisfaction.

In order for an organization to become a world class organization, one of the aspects that need to be emphasized is the human resource. Human resource is an asset that provides the foundation for Optimal Group of Companies to continue embarking its journey towards achieving a world class organization. It is not the ISO 9002 or TQM that pave the way for Optimal to achieve the world class organization. Members of the organization with the highest level of job satisfaction are the greatest assets to the organization. Therefore, in order to ensure that Optimal is moving toward and becoming a World Class Organization, preemptive measures ought to be taken to ensure that job satisfaction is present among its employees as well as individuals. Only then, the organization would be able to create the highest job satisfied employees at all level. Generally, the ability of an organization to achieve its organizational vision and mission relies on the organizational effectiveness of handling and managing its human resources factor as compared to other organizational factors. Thus, it is believed that job satisfaction would have a great influence in nurturing a world class organization culture such as building and understanding a shared vision, team learning, developing innovative and creative products, providing quality and reliable products and services, objective thinking, and freedom to speak.

## **1.6 THE SCOPE OF THE STUDY**

The study attempts to examine the relationships between job characteristics such as skill variety, task identity, task significance, autonomy, and job feedback that are related to job satisfaction in Optimal Group of Companies. The respondents involved in this study are Optimal employees in all group levels such as administrative, technician, executive technologist, professional and management level in Kerteh, Trengganu.

## **1.7 RESEARCH QUESTIONS**

The purposes of the research were addressed by answering the following questions:

- The relationship between skill variety and job satisfaction
- The relationship between task identity and job satisfaction
- The relationship between task significance and job satisfaction
- The relationship between autonomy and job satisfaction
- The relationship between job feedback and job satisfaction
- The relationship between demographic factors and job satisfaction

## **1.8 LIMITATIONS**

The data for this study was gathered using a questionnaire which depends on the voluntary cooperation of the participants. Participants can differ from participative to non-participative, therefore, compromising the interpretation and generalizability of the results (Isaac & Michael, 1990).

Another limitation of this research is the possible time constraints where respondents have only 15 days to answer the questionnaire followed by 2 weeks for analysis. Besides, the respondents were only from the east coast, specifically Kerteh, Trengganu. Optimal Group of Companies has its headquarters located in Kuala Lumpur which is not included in this survey. In addition, this survey did not include the upper managerial levels in the Optimal Group as most are based in the Kuala Lumpur head office.

Furthermore, the study also faced some problems in getting the right information from the primary and secondary data due to the limited number of resources as a result of personalized type of study. Therefore, the extensive use of Internet resources is deemed

necessary in conducting the research which is sometimes beyond the researcher's capability and capacity as well.

Other possible limitation is that this is the first study conducted in the Optimal Group of Companies which may be a pathfinder as well as a few drawbacks, as any first endeavor would. The study also focuses on the correlation of only the five job characteristics to job satisfaction in organization.

## **1.9 RESEARCH ASSUMPTION**

This study assumes that the entire respondents involved and selected in the survey understood all the questions in the questionnaire and they faithfully, ethically and calmly answered all the questions without internal and external interference.

## **1.10 STRUCTURE OF THE STUDY**

This study is structured into five chapters. Chapter one has been discussed thoroughly in this chapter. Chapter two addresses the literature review and it comprises of as follows: (a) The Meaning of Job Characteristics, (b) The Job Characteristics Model – Hackman-Oldman Approach, Behavioral Approach and System Approaches, (c) Job Satisfaction – Relationship between Job Satisfaction and Work Behavior, Performance, Customer Satisfaction, Pay and Colleague, (d) Demographic Characteristics – Gender, Age, Tenure, Job Position/Group, Education and Marital Status, (e) Hypothesis Development, (f) Operational Definition and (g) Summary.

Chapter three explains the research methodology applied. It includes a description of the research sampling as well as the participants, the instrumentation used, data collection

and sampling procedures. Chapter four contains the findings and data analysis. Finally, summary, discussion, recommendations and conclusion follow in Chapter five.

### **1.11 DEFINITION OF KEY TERMS**

Below are some of the key terms that are used in this research

#### Hypothesis

A proposition that is empirically testable

#### Job Satisfaction

Represent a person's evaluation of his or her job and work context. It is an appraisal of the perceived job characteristics, work environment, and emotional experiences at work

#### Job Characteristic

A job design model that relates the motivational properties of jobs to specific personal and organizational consequences of those properties

## CHAPTER II

*"We've got employees who own the company, whose interests are directly aligned with the interests of the company,"*

-Sandy Campbell

## LITERATURE REVIEW

### 2.1 INTRODUCTION

The general purpose of this study is to assess the readiness of Optimal Group of Companies turning to be a World Class Performance Organization. The primary goal of the literature review is to review important information about the construct of Job Satisfaction and assessing the readiness of the individuals who serve the Optimal Group of Companies. The literature review addresses: (a) The Meaning of Job Characteristics, (b) The Job Characteristics Model – Hackman-Oldman Approach, Behavioral Approaches and System Approaches, (c) Job Satisfaction – Relationship between Job Satisfaction and Work Behavior, Performance, Supervision, Pay and Colleague, (d) Demographic Characteristics – Gender, Age, Tenure, Job Position/Group, Education and Marital Status and finally (e) Summary.

### 2.2 GENERAL

What are some central features of a "World Class Organization"? A World Class Organization is one in which people at all levels, individually and collectively, are continually increasing their capacity to produce results they really care about and aligned to the organization business needs (Marquardt, 1998). Why should organizations care? Because the level of performance and improvement needed today requires employees to be satisfied with their jobs. In most industries and in most government agencies, there is no clear path to success, no clear path to follow. What's in it for the people? Therefore, satisfied with one job



is enormously rewarding and personally satisfying. For those of us working in the field, the possibility of a win - win is part of the attraction. That is, the possibility of achieving extraordinary performance together with satisfaction and fulfillment for the individuals involved.

In a simple laymen term, the organizations that will truly excel in future will be the organizations that discover how to tap people's commitment and satisfaction with their jobs at all levels in an organization. Most of us at one time or another has been part of the great team, a group of people who work together in an extraordinary way – who trust one another, who complement each others' strength and compensate for each others' limitations, who had common goals that were larger than individual goals, and who had produce extraordinary results. The team that became great did not start off great – the members learn how to be satisfied in performing their jobs.

Most significant management analyst who has contributed to both describing and studying the job characteristics model that influences the job satisfaction has been Hackman and Oldham (1980). They studied the job characteristics as having five dimensions such as skill variety, task identity, task significance, autonomous and task feedback.

### **2.3 DEFINITION OF JOB CHARACTERISTICS**

Job Characteristics have emerged as an important application area for study of both job satisfaction and organizational behavior. Organizational behavior scholars generally agree that the deepest “passion” for performing a job well comes from the work itself (Mc Shane, 2005). Job design is always changing due to technological change and trends in psychological contracts (Mc Shane, 2005). Whether the change occurs through information

technology or workforce flexibility, job design always produces an interesting conflict between the employee's motivation and ability to complete the work. Job design or work design refers to a process of dividing up an organization's total work into various jobs and assigning tasks to those jobs. It may also involve examining the goals and interdependence of tasks, as well as, the interpersonal relationships involved in accomplishing work. Because both the tasks involved in doing a job and how these tasks are performed can change, managers need to know how to design and redesign jobs to make them as meaningful and productive as possible. Thus, a good job design is one that meets organizational requirements for high performance, offers a good fit with individual's skills and needs, provides workers with challenging goals and meaningful work, and provides opportunities for job satisfaction and career advancement.

Historically, the main focus of job design efforts can be traced back to what has become known as the philosophy of job simplification or job specialization where complex tasks are broken down into a series of simpler tasks to enhance performance. In more recent years, however, the nature of work has changed dramatically. A number of job redesign strategies have been adopted by organizations to counter the negative psychological effects of specialization including job enlargement, job enrichment, and autonomous work groups. These ideas were popular during the 1960's and 1970's, and various aspects of these designs can be seen today in the form of high performance teams, empowerment, learning organizations, and total quality production. Luthans (1995) suggested various approaches and dimensions to job design such as: -

- Job Scientific Management – involves systematically partitioning of work into its smallest elements and the standardization of tasks to achieve maximum efficiency.

- Job Enrichment – involves the process of incorporating motivators into a job situation.
- Job Enlargement – involves the process of increasing the number of operations an individual performs of a job.
- Job Rotation – involve the process of moving workers from one job to another rather than requiring them to perform only one simple and specialized job over the long-term.
- Job Characteristics – involves the process of identifying five core characteristics such as skill variety, task identity, task significance, autonomy and task feedback.

### 2.3.1 System Approaches

System approaches focus on network of jobs that exist within larger organizational units. There are numerous system-oriented approaches that are useful to the analysis of work organizations. One theory stands out as having the most relevance of design and redesign of jobs and work systems. This is the socio-technical theory developed by scholars such as Albert Chermis, Eric Trist and Louis Davis.

The socio-technical systems approach to enrichment originated in the early 1950's at the Tavistock Institute of Human Relations in London and provided a foundation for group designs. Studies of coal mining processes in Great Britain found that productivity can suffer when either technical or social factors were allowed to dictate work processes (Marilyn, 2006). In essence, the model advocates designing work that put together people and technology to optimize the relationships between social systems and technology. That is, if frequent interaction is required by the

production technology being used, then workers should work in groups that allow them to communicate as they perform their job duties (Marilyn, 2006). This would enhance employee job satisfaction and performance in the workplace. The Tavistock researchers identified some general principles or requirements that were central to employee motivation and satisfaction. These requirements are similar to the work of Hackman and Oldman but were developed independently in England. They are as follows (Marilyn, 2006):-

- Employees should be able to see an identifiable product as a result of their work.
- Employees should be able to see how their products affect others.
- Employees should have some decision making discretion.
- Employees should be able to continuously learn while on the job.
- Employees should be trained and have their work recognized by others.

The more contemporary concept of semi-autonomous work groups evolved from this innovative research. In essence, work groups are given decision making discretion over various aspects of their work such as what methods to use, how to solve problems, and allocate resources (Marilyn, 2006). More recently, we see labels such as self-managed teams, self-directed work groups, or flexible work groups to describe this type of work design. Without question, the socio-technical approach to enrichment has had a major impact on group research and practice. There has been an increase in team effectiveness models, which make more precise propositions and specifications about how group processes and group design factors affect outcomes (Marilyn, 2006). In addition, the potential advantages and disadvantages of group-based designs have been studied and documented. Some examples include, group workers often experience increased job satisfaction and commitment and are able to